

REMARKS

A. Introduction

In the final Office Action mailed on November 13, 2006, the Examiner rejected claims 28-52 under 35 U.S.C. § 103(a) over the combination of Perkes (Pub. No. US 2003/0110503) and Omoigui (Pub. No. 2003/0126136). Applicants herein amend claim 28 to clarify the subject matter for which applicants seek protection. As a result, claims 28-52 are now pending. For reasons discussed in detail below, applicants submit that the pending claims are now in condition for allowance.

B. Rejections Under 35 U.S.C. § 103(a)

The Examiner rejected claims 28-52 under 35 U.S.C. § 103(a) over the combination of Perkes and Omoigui.

Perkes describes a media-on-demand framework that collects pre-categorized media of different types for presentation to a consumer. (pars. 0012, 0061). As a consumer interacts with the Perkes system, information regarding the consumer's usage is collected to profile the consumer's perceived interests. (pars. 0043-0045). "The collected information can include the type of digital media the consumer views or listens to (Internet, movies, video, music, DVD, CD, TV/HDTV, etc.) and details about that digital material (i.e., genre, title, run time, artist, etc.)..." (par. 0036). The information collected...is categorized according to the content types referred to above." (par. 0044). For example, there may be a predefined category for sports and a predefined subcategory for baseball that contains videos from baseball games. Perkes further describes that "content items may be part of multiple categories" as the system "processes the [collected] information and compares it to one or more databases of content grouped in similar categories and classifications" (par. 0044). For example, the Perkes system "obtains logs on the websites visited by the consumer, whereby the metatags obtained from those web sites are collected to obtain information regarding the types of websites (e.g., sports, entertainment) the user prefers."

(par. 0040). The collected information may be used to further refine the profile of the consumer "to the point where the consumer will be delivered more specific content." (par. 0040).

Omoigui describes an "intelligent, learning web" that uses "semantic data" to improve data retrieval. (pars. 0344, 0526). For example, a user may search a database containing music files for "all country songs that are duets." The system would know to retrieve songs performed by two artists and which artists perform country music.

In contrast, applicants' technology is directed to improving search results by automatically categorizing and attributing metadata to media entities in a data store based on their proximity in a map of the data store to media entities that have metadata attributed to them. (par. 0039). For example, as illustrated in Figure 2 of applicants' specification, an operator may attribute the metadata category "showbiz" to media entity 214, which is located in the fourth level of the data store. Based upon the proximity of media entity 218 and media entity 214, applicants' technology identifies media entity 218 and automatically attributes metadata to media entity 218 indicating that it belongs to the category "showbiz."

As amended, independent claim 28 recites, in part, "receiving user input designating a portion of a map of [a] data store...as corresponding to [a] distinguished category," "automatically identifying a plurality of media entities located within the designated portion of the map," and "based upon the location...automatically attributing metadata to each of the plurality of media entities indicating that each belongs to the distinguished category." Perkes and Omoigui neither, individually nor in combination, teach or suggest the claimed features.

First, the Examiner relies on Perkes description of a program guide as providing "receiving user input designating a portion of a map of [a] data store...as corresponding to [a] distinguished category." (pars. 0013-0014, 0030-0032, 0045 and 0268). However, in paragraph 0268, Perkes describes that "media objects are filtered by metadata and

presented in navigable arrays on user interface screens" so that the user can "move fluidly between individual objects and object arrays (e.g., songs, play lists), groups of objects and object arrays (e.g., albums, discographies and libraries)...." That is, the Perkes system generates a program guide by filtering from a set of pre-categorized media objects only those objects having categories consistent with user input reflecting the user's interests. This type of user input—whether navigating the guide, selecting media, or selecting a display format for the guide—is neither related to "designating a portion of a map of [a] data store...as corresponding to [a] distinguished category" nor related to "attributing metadata to [media objects]."

Second, the Examiner relies upon paragraphs 0012-0013, 0044-0045 and 0228 of Perkes as providing "automatically attributing metadata to [media objects]." However, because all of the media objects that Perkes describes are pre-categorized (i.e., the Perkes system selects content having metadata common to selected media objects), Perkes fails to teach or suggest "attributing metadata to [media objects]."

Perkes describes that a "media object" is a "discrete or objective instances of a given media type plus its metadata descriptor [e.g., "information relating to the name of the media object, duration of the media object, genre of the media object," etc. (par. 0013)]. (pars. 0012, 0247). As discussed above, when a consumer interacts with the Perkes system (e.g., downloads a song), information regarding the consumer's media usage is collected to profile the consumer's perceived interests. (pars. 0043-0045). Perkes describes three techniques to select content for delivery to a user. In each technique, metadata associated with the user-selected content is collected and processed. For example, Perkes describes a technique which logs websites visited by the user, "whereby the metatags obtained from those websites are collected to obtain information regarding the types of websites (e.g., sports, entertainment) the user prefers. (par. 0040). In addition to logging websites, another technique logs the user's "music listening habits" by "[u]sing metatags associated with digital music files..." to profile the types of music the user prefers. (par. 0040). Likewise, Perkes also describes a technique which logs the

user's television viewing habits "by obtaining information obtained from the television signal itself or in combination with a TV-program database..." to profile the types of television the user prefers. (par. 0040). Because Perkes merely uses associated metadata to process media objects into pre-categorized groups, the Perkes system fails to teach or suggest "attributing metadata to [media objects]."

The Examiner argues that paragraph 0045 of Perkes "describes the categorization of different data types, and the continuous refinement of categories and sub-categories based on the content of the document." However, as discussed above, the media objects described by Perkes are pre-categorized and refinement of these categories is simply a method of filtering or tailoring the content to be presented to the user. For example, Perkes describes that "the system processes the [collected] information and compares it to one or more databases of content grouped in similar categories and classifications" (par. 0044). Thus, refinement of a category into sub-categories is merely an indication that the system has collected information suggesting a perceived interest, which then triggers the system "to select content that meets the consumer's perceived interests." (par. 0045).

Finally, the Examiner relies on Omoigui for disclosure of "how objects are categorized and utilized." However, Omoigui describes, with little detail, three methods of media object categorization. Omoigui describes media objects "inherit[ing] all predicates from the root type." (par. 0579). The inheritance method described by Omoigui attributes multiple types to one object. For example, when a type is attributed to a particular media object, any types that are ancestors of that type are also attributed to the object. In contrast, applicants' technology provides "automatically attributing metadata to each of the plurality of media entities [located within the designated portion of the map] indicating that each of the plurality of media entities belongs to the distinguished category." With applicants' technology, users can designate areas that span multiple subcategories and are not limited to attributing metadata vertically through the hierarchy.

In addition to categorizing objects using inheritance, Omoigui describes using "XML Web Service Calls" or a "categorization engine." (pars. 0681, 0706). Omoigui, however, does not explain how these services categorize objects. Omoigui describes a Web Service as "representing black-box functionality that can be reused without worrying about how the service is implemented." (par. 0313). A categorization engine "take[s] a piece of text or XML...and returns the categories...that the text or XML belong to, along with categorization scores. Omoigui does not provide an example of how to implement a Web Service or categorization engine.

Omoigui also describes an "inference engine," which uses ongoing activity and "probabilistic inferences" to categorize objects. (pars. 0622-0628). The inference engine does not allow a user to "designat[e] a portion of a map of [a] data store" and "automatically attribute[e] metadata to [media objects located within the designated portion of the map]." Therefore, Omoigui also fails to teach or suggest the claimed approach of "attributing metadata to [media objects]" as recited by independent claim 28.

For at least these reasons, it is clear that Perkes and Omoigui, individually and in combination, fail to teach or suggest the claimed invention. Therefore, the suggested combination does not make claim 28 obvious and applicants respectfully request that this rejection be withdrawn.

Likewise, independent claim 40 recites, in part, "receiving user input designating a portion of a map of [a] data store...as corresponding to the distinguished category," "automatically identifying a second media entity within the data store belonging to the distinguished category" and "based upon belonging to the category, automatically attributing metadata to the second media entity indicating that it belongs to the distinguished category." Also, independent claim 52 recites, in part, "user input designating a portion of a map of the data store containing [a] media entity as corresponding to [a] category," and rules "to automatically associate the metadata with identified media entities belonging to the category." These features are neither taught nor

suggested by the applied combination, as described above. Thus, claims 40 and 52 are also allowable for similar reasons.

In addition, "[i]t is improper to combine references where the references teach away from their combination." (MPEP § 2145(X)(D)(2)). As is stated above, Perkes describes a technique that "evaluates the consumer's perceived preferences and, using predictive models, determines content types that might be of interest to the consumer." (par. 0047). In contrast, Omoigui discredits Perkes method of selecting content to be delivered to the user. Specifically, Omoigui characterizes Perkes technique as "index-driven rather than context-driven," i.e., "techniques [that] rely on historical user search trends to make basic assumptions as to desired information...[or] rely on categorization of Web sites to further focus the search results to areas anticipated to be most relevant." (par. 0009). According to Omoigui, such techniques result in "continued ambiguity and inefficiency." (par. 0009). Therefore, because Omoigui teaches away from Perkes, it cannot be combined to render applicants' claims obvious.

However, even if the references can be combined, the potential combination is not sufficient to establish a *prima facie* case of obviousness. "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination." (MPEP § 2143.01(III); emphasis in original). This requirement, which demands that there be some teaching, suggestion, or motivation to combine the references, protects against the use of impermissible hindsight reasoning. "Defining the problem in terms of its solution reveals improper hindsight in the selection of the prior art relevant to obviousness." In re Kahn, Fed. Cir. 2006 (quoting Ecolocchem, Inc. v. S. Cal. Edison Co., 227 F.3d 1361, 1372 (Fed. Cir. 2000) (quoting Monarch Knitting Mach. Corp. v. Sulzer Morat GmbH, 139 F.3d 877, 881 (Fed. Cir. 1998))). Accordingly, the motivation to combine prior art references must be based upon specific teaching in the prior art, such as a specific suggestion in the prior art reference.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure.

In re Vaeck, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). MPEP § 2143 (emphasis added).

The Office Action indicates that one skilled in the art would have been motivated to combine Omoigui with Perkes "to periodically categorize objects in searchable data storages in order to help users search for certain subjects quicker and thus, better search results." However, applicants cannot find a teaching or suggestion to combine Perkes and Omoigui. Instead, the motivation provided by the Examiner appears to be based solely on the alleged beneficial results that would be produced by the combination, without identifying any motivation from the prior art that supports the extension as is required. Applicants accordingly request that the Examiner reconsider and withdraw this rejection. If the Examiner elects to maintain this rejection, however, applicants respectfully request that the Examiner explain with the required specificity where a suggestion or motivation to combine the references in the manner proposed by the Examiner can be found in the prior art.

C. Conclusion

It is clear that the applied references, individually and in combination, fail to teach or suggest the claimed invention. Moreover, there is no motivation to combine the references, which in fact teach away from their combination. Therefore, for at least the reasons stated above, independent claims 28, 40 and 52 teach a novel combination of


elements that is neither taught nor suggested by the applied references, whether alone or in combination, and so cannot be rejected under 35 U.S.C. § 103(a).

In addition, because dependent claims 29-39 and 41-51 import the limitations from the claims on which they depend, they are allowable for at least the same reasons and cannot be rejected under 35 U.S.C. § 103(a).

Applicants believe no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 50-0665, under Order No. 283108004US from which the undersigned is authorized to draw.

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